

26 September, 2001

## MODIS sensor Working Group (MsWG) Summary

**Attendance:** Suraiya Ahmad, Bill Barnes, Stuart Biggar, Roger Drake, Wayne Esaias, Bob Evans, Vince Salomonson, Gary Toller, Jack Xiong, Eric Vermote, Zhengming Wan, Jim Young, Joe Esposito

---

### ***Scheduled Items***

- **FM1 - TRW TV RVS Test Result (preliminary): Xiong**
  - Mirror side 2 versus mirror side 1**
  - Plots indicate that the TEB RVS for all detectors is essentially the same (flat) for ms1 and ms2 (ratio is near 1) at TRW. No mirror side difference.
  - All TEB ratios are 1 +/- 0.1% except for B21 (low signal), noisy detector 1 (SBRs order) in B20, and for detector 6 (SBRs order) in band 36.
  - On PFM, we see a mirror side dependence on-orbit, 1-3% in PC bands and some pattern change.
  - Wish to get on-orbit Aqua test with NADIR port closed.
  - Do not see drifting in TEB between earlier tests and TRW.
  - SWIR is consistent with Roger's comments on 9/19/2001.
  - We must next analyze the X-talk data. FM1 X-talk is known to be smaller than for PFM.
  - SpMA data can complement SRCA X-talk test (**RD**).
  - MWIR needs to be checked as well.
  - FM1 is currently at cold plateau.
- **PFM – PFM related issues –**
  - We have looked at data and do not see correlation between formatter resets and data packet dropouts.
  - Bob sent images (data) and there is no correlation seen. A mirror side index error and geo-location errors caused the problem in the image.
  - This indicates that the problem is in data set before L1A.
  - Are you getting L0 data? (**BB**)
  - We use L1A, which is no different than L0, since we do not need geo-location (MOD03) to do the analysis. We looked at granule data with dropouts and formatter errors. The timing peaks of dropouts and formatter errors do not match. We have previously seen similar dropouts with no formatter errors.
  - We have seen punch card effect on both A-side and B-side (**EV**).
  - If packets are missing then L1A contains fill values. Errors like mirror index may be due to a flip bit error.

### ***Around the Table***

**Participant:** Bob Evans

Granules:2001263.0313 and 2001268.1532 from direct broadcast.

The problem starts at a particular scan then clears up at a later scan. Band 22 is the most affected along with B29, B31, and B32. The effect manifests in B22 for 5 detectors with the other 5 detectors not showing this effect.

MCST has not received this data to see if it is in L1A, L1B, or only in direct broadcast product . Which product are you using **(JX)**

(Direct Broadcast) L1B converted into radiance .

Need to determine if it is in L1A, L1B, or due to the direct broadcast **(JX)**

How is the Black Body averaging done? **(EV)**

BB is measured each scan and averaged over +- 20 scans. Bad data is rejected **(JX)**

**Participant: Vince Salomonson: Workshop**

Vince asked about workshop status

The best time for the Workshop would be 17-19 December **(BB)**

Simpson may be speaking at the AGU meeting earlier in December. Better to meet with him before the AGU.

Bill and Jack will speak about setting up the workshop and possibly a special meeting with Simpson. **(BB)**

**Participant: Eric Vermote**

We haven't looked at the thermal leak data yet. What will be done about the SDSM screen?

There will be no SDSM screen replacement. We feel we can stay with the same modeling approach as on PFM. **(BB)**

SDSM detector 9 is used to normalize the other SDSM detectors; the SD at the D9 wavelength is not expected to degrade. We can also use lunar and SRCA measurements to monitor degradation near the wavelength of D9 **(JX)**

SBRS has run tests on the SDSM. **(SB)**

An SDSM rework requires tilting the sun screen into the instrument. This could cause undesirable stray light leaks. **(RD)**

**Participant: Gary Toller**

The 2001212 B5 gain change has reduced the B5 detector saturation

**Participant: Suraiya Ahmad**

Processing status: Reprocessing at 2000319 [Nov. 13]; Forward processing at 2001263 [Sept.20].

MCST needs two days of L1A and L1B data September 19 and 20<sup>th</sup>. We started getting the data today **(JX)**

**Participant: Wayne Esaias**

We have not yet received data from our standing Hawaii data order.

---

*Compiled by J. A. Esposito 26 September, 2001*